words to fit into the raster in one piece, since the length of a Huffman code word is known from the word itself. A decoder thus knows whether it has read only part of a code word. In this case it will automatically add to the first part of the code word a certain number of bits following the priority code word after the next raster point. It is therefore possible to insert a first part of a non-priority code word in a first free position in the raster and the remaining part at some other place, as is shown for the non-priority code words 7, 8 and 9, each of which has been subdivided into two in the bit stream, namely into 7a, 7b and 8a, 8b and 9a, 9b.

As has already been described, the second part of the bit stream of Fig. 1 illustrates the second aspect of the present invention. If the raster distance D1 were not altered to a smaller raster distance D2, a raster with the spacing D1 in which all the priority code words 1 to 5 are to be arranged would lead to such a long bit stream that there would not, so to speak, be enough non-priority code words to fill up all the spaces remaining in the raster. Therefore only so many priority code words are extracted from an audio signal as can be inserted in the bit stream so that essentially no free places remain, i.e. without causing the bit stream to be extended unnecessarily.

The second aspect of the present invention will now be discussed in detail making reference to Fig. 1. In the case of the coding method according to the standard MPEG-2 AAC, 11 different Huffman code tables can be used for the coding. For the majority of these tables the maximum possible code word length lies between 10 and 20 bits. However, a special table, the so-called "escape" table, encompasses a maximum length of 49 bits. If one were to use the length of the longest code word of all the tables as raster distance D, one would have a raster distance of 49 bits, which would result in a raster of

very great width and therefore inefficient for nearly all the tables since the bit stream would be far too long if all the priority code words are to be aligned with a raster point. According to the present invention the width of the raster is therefore adjusted in dependence on the code table which is used. As was mentioned previously, spectral values can be grouped into spectral sections, each spectral section then being assigned a code table which is optimally suited to it taking signal statistical aspects into account. The maximum code word length in one code table normally differs from the maximum code word length of another table, however.

It is assumed that the spectral values represented by the code words 1 and 2 belong to a first spectral section while the spectral values represented by the code words 3 - 10 belong to a second spectral section. The bit stream is then rastered using 2 groups of raster points, the first group of raster points consisting of the raster points 10, 12 and 14, the second group of raster points consisting of the raster points 14, 16 and 18. It is assumed further that the spectral section 0 has been assigned the Huffman code table n and the spectral section 1 has been assigned the Huffman code table m, also that the code word 2 is the longest code word of the table n which has been assigned to the spectral section 0. The raster distance of the first group of raster points is chosen to be greater than or, preferably, equal to the maximum length of the code word of table n, i.e. of the code word 2 in the example.

On the other hand from the section of the bit stream between the raster point 14 and the end of the bit stream at code word No. 10 it can be seen that in this example the code word with the maximum length of the code table m does not appear in the bit stream. There is thus no code word of length D2 in the bit stream raster denoted by group 2.

According to the second aspect of the present invention the width of the raster is thus chosen depending on the code table which is used. It should be noted, however, that in this case the table used must already be known when decoding in the decoder. This is the case, however, since a code table number is always transmitted as side information for each spectral section, thus enabling the decoder to identify this code table within a specified set of, in this example 11, different Huffman tables.

As has already been mentioned, optimal data reduction can still not be achieved when the raster distance depends on the code table used, as is plain to see just by considering the escape table, which has a length of 49 bits, since, in the case of an escape table, the raster width is adjusted to 49 bits so as to code spectral values of maximum size. Escape tables are employed in order to have relatively short code tables while being able at the same time to code relatively large values using the short code tables in conjunction with an escape table. In the case of a value which exceeds the value range of a code table, the code word for this spectral value assumes a predetermined value, which indicates to the decoder that an escape table has also been used in the coder. If a code table encompasses the values 0 - 2, for example, a value of 3 in the code table would indicate to the decoder that an escape table has been accessed. The code word with the value 3 of the "basic" code table is simultaneously assigned an escape table value which, in conjunction with the maximum value of the basic code table, constitutes the corresponding spectral value.

According to a further embodiment of the second aspect of the present invention the distance between the raster points of a group (e.g. of the group 1 or group 2) is no longer chosen to